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APPLICATION NO.	FI	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/750,939	-	01/02/2004	Edward G. Niles	11520.0333	2269
26712	7590	09/11/2006		EXAMINER	
HODGSON	N RUSS I	LLP	LE, EMILY M		
ONE M & T SUITE 2000			ART UNIT	PAPER NUMBER	
BUFFALO, NY 14203-2391				1648	
•				DATE MAILED: 09/11/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Commence	10/750,939	NILES ET AL.					
Office Action Summary	Examiner	Art Unit					
	Emily Le	1648					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE!	N. sely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on <u>02 Ja</u>	nuary 2004.	·					
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<u> </u>							
.—	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>1-29</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6) Claim(s) is/are rejected.							
7) Claim(s) is/are objected to.							
· · · · · · · · · · · · · · · · · · ·	Claim(s) israte objected to. Claim(s) <u>1-29</u> are subject to restriction and/or election requirement.						
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Application Papers							
9) The specification is objected to by the Examine							
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:		-(d) or (f).					
1. Certified copies of the priority documents							
2. Certified copies of the priority documents							
3. Copies of the certified copies of the prior	•	ed in this National Stage					
application from the International Bureau	, , , ,						
* See the attached detailed Office action for a list	of the certified copies not receive	a.					
Attachment(s)	_						
1) Notice of References Cited (PTO-892)	4) Interview Summary						
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	atent Application (PTO-152)					
0.0.							

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DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-12, drawn to an oligonucleotide and a composition comprising the oligonucleotide, classified in class 536, subclass 23.1.
- II. Claims 13-15, drawn to a method of generating premature transcription termination products, classified in class 435, subclass 461.
- III. Claims 16-29, drawn to a method of inhibiting poxvirus replication in an individual, wherein the poxvirus is smallpox, Monkey pox, vaccinia virus, cowpox, mouse pox, orf virus or swine pox, classified in class 435, subclass 6.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I-III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the product as claimed can be used in a materially different process of using that product, as evidenced by the inventions listed as Groups II-III. The invention listed as group II uses the product of Group I to generate premature transcription termination products, whereas, the invention listed as Group III uses the product of Group I to inhibit poxvirus replication in an individual.

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3. Inventions II and III are directed to related processes The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant, the inventions listed as Groups II-III have a materially different design, mode of operation, function and effect. The material design of the invention listed as Group II includes a cell, the product of Group I, and gel electrophoresis; whereas the material design of the invention listed as Group III includes the product of Group I and an individual. The mode of operation also differs between the two inventions. The invention listed as Group II is directed at contacting cell with the product of Group I, whereas, the invention listed as Group III is directed at the administration of the product of Group I to an individual. Lastly, the function and effect of the invention listed as Group II is directed at generating premature transcription termination products, whereas the function and effect of the invention listed as Group III is directed at preventing or treating pox viral infection by inhibiting the replication of the virus. In the instant, because the inventions listed as Groups II-III are mutually exclusive of one another for the reasons set forth above; the inventions are distinct from one another. Thus, a restriction between distinct processes is required.

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4. Because these inventions are independent or distinct for the reasons given above, have acquired a separate status in the art in view of their different classification,

and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

5. This application contains claims directed to the following patentably distinct species: SEQ ID NO: 3, 5,12, 13, 14, 17, 18 and 19. The species are independent or distinct because each has a structural feature that is different from the other, as evidenced by the different sequence identifier numbers assigned.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic to the listed species.

6. This application contains claims directed to the following patentably distinct species: smallpox, Monkey pox, vaccinia virus, cowpox, mouse pox, orf virus or swine pox. Broadly, unity of invention exists where compounds included within a Markush group (1) share a common utility, and (2) share a substantial structural feature essential to that utility. See In re Harnisch, 631 F.2d 716, 206 USPQ 300 (CCPA 1980); and Ex parte Hozumi, 3 USPQ2d 1059 (Bd. Pat. App. & Int. 1984). In the instant, smallpox, Monkey pox, vaccinia virus, cowpox, mouse pox, orf virus and swine pox differ from one another genotypically and have differing pathogenicity. For instance, Cowpox is a disease of the skin caused by a virus, Cowpox virus, that is related to the Vaccinia virus, wherein the Vaccinia virus (VACV or VV) is a large, complex enveloped virus having a linear double-stranded DNA genome that is approximately 190 kb in length and encodes for approximately 250 genes. And the Cowpox ailment manifests itself in the form of red blisters and is transmitted by touch from cows to humans. Whereas,

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Smallpox is a highly contagious viral disease unique to humans, and it is caused by two virus variants called Variola major and Variola minor. In the instant, the compounds listed within the Markush group do not share a common utility nor do they share substantial structural feature that is essential to that utility. Hence, the compounds are distinct from one another.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 16 is generic.

- 7. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

 MPEP § 809.02(a).
- 8. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.
- 9. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

10. The examiner has required restriction between product and process claims.

Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder.

All claims directed a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product

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claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

11. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Le whose telephone number is (571) 272 0903. The examiner can normally be reached on Monday - Friday, 8 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce R. Campell can be reached on (571) 272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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